

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/100158 A1

(51) International Patent Classification⁷: **G11B 20/10**

(21) International Application Number:
PCT/KR2004/001073

(22) International Filing Date: 10 May 2004 (10.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2003-0029623 10 May 2003 (10.05.2003) KR

(71) Applicant (for all designated States except US): **SAM-SUNG ELECTRONICS CO., LTD.** [KR/KR]; 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHUNG, Hyun-Kwon** [KR/KR]; (302) 569 Shinsa-dong, Gangnam-gu, Seoul 135-120 (KR). **MOON, Seong-Jin** [KR/KR]; 436-502 Cheongmyung Maeul 4-danji Apt., 1046-1, Yeongtong-dong, Yeongtong-gu Suwon-si,

Gyeonggi-do 443-738 (KR). **YOON, Bum-Sik** [KR/KR]; 407-1702 Jeongdeun Maeul Woosung Apt., Jeongja-dong, Bundang-gu Seongnam-si, Gyeonggi-do 463-010 (KR).

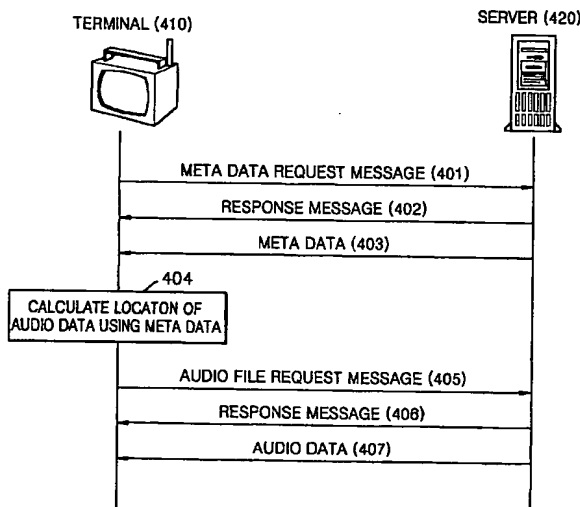
(74) Agent: **LEE, Young-Pil**; The Cheonghwa Building, 1571-18 Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: MULTIMEDIA DATA REPRODUCING APPARATUS, AUDIO DATA RECEIVING METHOD AND AUDIO DATA STRUCTURE THEREIN



(57) Abstract: Provided are a multimedia data decoding apparatus, a method of receiving audio data using an HTTP protocol and an audio data structure used for the apparatus and method. The multimedia data reproducing apparatus comprising: a decoder receiving AV data, decoding the AV data, and reproducing the AV data in synchronization with predetermined markup data related to the AV data; and a markup resource decoder receiving location information of video data being reproduced by the decoder, calculating a reproducing location of the markup data related to the video, and transmitting the reproducing location of the markup data to the decoder. Audio data is received using the HTTP protocol, not a complex audio/video streaming protocol, and is output in synchronization with video data.



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.